



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,149	03/16/2001	Makoto Ikeda	12052.41US01	5803
23552	7590	05/03/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			WORKU, NEGUSSIE	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,149

Applicant(s)

IKEDA, MAKOTO

Examiner

Negussie Worku

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Negussie Worku

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/13/2004/6/25/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Information Disclosure statement (IDS) filed on May 13, 2004 and June 25, 2001 have been considered.
2. Applicant's preliminary amendment submitted on March 16, 2001, to remove a multiple dependencies from claims 3, 4 and 8 have been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Voser et al. (USP 6,172,745).

With respect to claim 1, Voser et al. discloses a line illuminating device (as shown in fig 1) having two light guides (16 and 18 of fig 1) for guiding light from a light source (two light source 8 and 10) incident from an end surface in the longitudinal direction and for emitting the light from an emission plane formed along the longitudinal

direction, (a sensing module 4 has two light source 8 and 10) characterized in that these light guides are arranged in such a manner that the light emitted from the emission plane of each light guide irradiates the same area of a document-reading plane, (a sensing module 4 has two light source 8 and 10, and light guides 16 and 18, for irradiating the same area of the surface of document, see col.5, lines 6-10), and one light guide is provided, at one end of its longitudinal direction, (both light guide 16 and 18 of fig 1, are positioned at one end of its longitudinal direction, see col.4, lines 65-67), and with a first light emitting source, (light source 18 of fig 1) while the other light guide (16 of fig 1) is provided, at the other end of its longitudinal direction, with a second light-emitting source (light source 10 or 8 of fig 1).

With respect to claim 2, Voser et al. discloses the line-illuminating device (as shown in fig 1), wherein each light guide (18 and 16 of fig 1) is symmetrically arranged relative to a plane where the emission plane is at right angles to the document-reading plane (document reading plane (surface) 2 of fig 1).

With respect to claim 3, Voser et al. discloses the line illuminating device (as shown fig 1), wherein each light guide (light guide 16 and 18 of fig 1) is housed in a casing in such a manner that at least the emission plane is exposed (emission plane (surface 2 of fig 1).

With respect to claim 4, Voser et al. discloses the line illuminating device (8 and 10 of fig 1), wherein the light guide (16 and 18 of fig 1) is formed with light-scattering patterns for scattering illuminating light (light guide 16 and 18 of fig 1, for directing light into the surface or document of fig 1) at a predetermined plane except for an incident plane and the emission plane of the light guide (16 and 18 of fig 1, guiding the light to same area of the document).

With respect to claim 5, Voser et al. discloses a line illuminating device (light source 8 and 10 of fig 1) having a pair of light guides (light guide 16 and 18 of fig 1) arranged to guide light from a light source incident from an end surface in the longitudinal direction (light guide 16 and 18 are arranged to direct the light to direction where the surface of the object is positioned), and to scatter the incident light at light scattering patterns formed intermittently over the longitudinal direction so as to irradiate the same area of a document reading plane, see (col.5, lines 5-10) characterized in that these light guides (16 and 18 are arranged in a way the light can be diverted to the surface of the document for a uniform illumination), are alternately arranged so that the light-scattering patterns formed on one light guide compensate for the shortage of light-scattering patterns formed on the other light guide (light guide 16 or 18 of fig 1).

With respect to claim 6, Voser et al. discloses the a line illuminating device (as shown in fig 1), wherein each light guide (18 and 16 of fig 1) is symmetrically arranged

Art Unit: 2626

relative to a plane where the emission plane is at right angles to the document-reading plane (document reading plane (surface) 2 of fig 1).

With respect to claim 7, Voser et al. discloses the line illuminating device (as shown in fig 1), wherein each light guide (18 and 16 of fig 1) is placed one upon another, see (fig 1), and the emission plane is arranged on one side relative to a plane where the emission plane is at right angles to the document-reading surface (emitting light from light source is guided by light guide 16 and 18, over the surface of the document, see col.4, lines 60-65).

With respect to claim 8, Voser et al. discloses the line illuminating device (as shown in fig 1) wherein, under conditions where the pair of light guides are arranged in such a manner that the light emitted from each emission plane irradiates the same area of the document-reading plane, (emitting light from light source is guided by light guide 16 and 18, over the surface of the document, see col.4, lines 60-65 and also col.5, lines 5-10), one light guide is provided with a light-emitting source at one end of the longitudinal direction, (both light guide 16 and 18 are provided with a light source 8 and 10 at the other end of the device as shown in fig 1), while the other light guide (16 of fig 1) is provided with a light-emitting source (with light source 8 of fig 1) at the other end of the longitudinal direction, see (col.4, lines 60-65).

With respect to claim 9, Voser et al. discloses the line illuminating device (as shown in fig 1), having a light guide (16 and 18 of fig 1) for guiding light from a light source (8 and 10 of fig 1) incident from an end surface in the longitudinal direction, (light guide 16 and 18 are arranged to direct the light to direction where the surface of the object is positioned), and for scattering the light at light-scattering patterns formed along the longitudinal direction to emit this light from an emission plane, this line illuminating device (8 and 10 of fig 1) being provided with two line illuminating unit (linear arrays 8 and 10 of fig 1) for housing the light guide (16 and 18 of fig 1) in a casing, characterized in that each line illuminating unit (linear arrays 8 and 10 of fig 1) is arranged in such a manner that the light emitted from the emission plane of each light guide irradiates the same area of the document-reading plane, (a sensing module 4 has two light source 8 and 10, and light guides 16 and 18, for irradiating the same area of the surface of document, see col.5, lines 6-10), and the light guide casing has at least an outside section treated to control scattering and reflection of the light, (the light guides 16 and 18 of fig 1, are made from a molded Plexiglas material, see col.4, lines 64-66).

With respect to claim 10, Voser et al. discloses the line illuminating device (as shown in fig 1), having a light guide (16 and 18 of fig 1) for conducting light from a light source (8 and 10 of fig 1) incident from an end surface in the longitudinal direction and for scattering the light at light-scattering patterns formed along the longitudinal direction to emit this light from an emission plane, (a sensing module 4 has two light source 8 and 10, and light guides 16 and 18, for irradiating the same area of the surface of

Art Unit: 2626

document, see col.5, lines 6-10), this line illuminating device (of fig 1) being provided with two line illuminating units (linear arrays 8 and 20 of fig 1) for housing the light guide in a casing, characterized in that each line illuminating unit (8 and 10 of fig 1) is arranged in such a manner that the light emitted from the emission plane of each light guide irradiates the same area of a document-reading plane, (a sensing module 4 has two light source 8 and 10, and light guides 16 and 18, for irradiating the same area of the surface of document, see col.5, lines 6-10) and the light guide casing has at least an outside section covered by a member for controlling scattering and reflection of the light (the light guides 16 and 18 of fig 1, are made from a molded Plexiglas material, see col.4, lines 64-66).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 305-5441. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

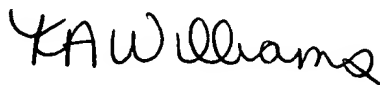
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2626

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Negussie Worku
04/23/05



KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER